



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/780,540 02/12/01 HIRAYAMA

Y 01028

EXAMINER

MMC1/0410
DENNISON, MESEROLE, SCHEINER & SCHULTZ
SUITE 612
1745 JEFFERSON DAVIS HIGHWAY
ARLINGTON VA 22202-3417

NEUVEN, T	
ART UNIT	PAPER NUMBER

2872
DATE MAILED:

04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/780,540

Applicant(s)

HIRAYAMA ET AL.

Examiner

Thong Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2001 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☒ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.

- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: ____.

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 02/16/2000. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

The Oath/Declaration is objected to because it contains a correction in which applicant has failed to make an initialed acknowledge. See the change on the execution date of the first inventor, Yoshihisa Hirayama.

Drawings

3. It is noted that applicant has filed a set of drawings on 02/12/2001; however, the drawings have not been examined by an Office draftsman at this time because the present drawings are objected to for the following reason.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature concerning the second angle of inclination is about 45 degrees as recited in claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claim 3/1 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3/1 is objected to because the claim fails to further limit the subject matter recited in its base claim 1. In particular, claim 3/1 recites that the second angle of inclination is 45 degrees; however, the base claim 1 recites that the second angle of inclination is smaller than the first angle of inclination.

It is noted that the present specification discloses a light guide member having a reflection surface with plural grooves formed on the reflection surface. Each of the grooves has a front side having a first angle of inclination and a rear side having a second angle of inclination. In an embodiment as provided at pages 5-6, applicant has provided an embodiment in which the angle defined by the front side and rear side of the groove is 90 degrees, and the second angle of inclination is 45 degrees. As a result of such a structure, the first angle of inclination will be $(90 \text{ degrees} - 45 \text{ degrees}) = 45 \text{ degrees}$. Since both the first

Spec
page 6
line 4
 $45^\circ (90^\circ - 45^\circ)$
 $45^\circ (90^\circ - 45^\circ)$

and second angles of inclination are equal to each other; therefore, the feature recites in claim 3/1 is considered as failing to further limit the subject matter thereof "each of...angle" recited in base claim 1, lines 12-15).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 3 is rejected under 35 USC 112, first paragraph because the specification does not disclose a light guide element having a reflecting surface with a plural of grooves wherein each of the grooves meets both the limitations recited in claim 1 (lines 12-15) and claim 3/1 (lines 1-2). In other words, the specification does not teach that each of the grooves meets both conditions of 1) the second angle of inclination is both smaller than the first angle of inclination; and 2) the second angle of inclination is 45 degrees.

It is noted that the present specification discloses a light guide member having a reflection surface with plural grooves formed on the reflection surface. Each of the grooves has a front side having a first angle of inclination and a rear side having a second angle of inclination. In an embodiment as provided at pages 5-6,

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applicant has provided an embodiment in which the angle defined by the front side and rear side of the groove is 90 degrees, and the second angle of inclination is 45 degrees. As a result of such a structure, the first angle of inclination will be $(90 \text{ degrees} - 45 \text{ degrees}) = 45 \text{ degrees}$. Since both the first and second angles of inclination are equal to each other; therefore, the feature recites in claim 3/1 is considered as failing to further limit the subject matter thereof "each of...angle" recited in base claim 1, lines 12-15).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-6, as best as understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Redmond et al (U.S. Patent No. 5,664,862).

See Redmond et al, columns 2-3 and 5 and figures 1 and 7.

Conclusion

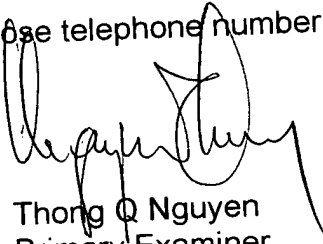
11. The additional references are cited as of interest in that each discloses an illuminating system for a display device wherein the illuminating system comprises a light guide element having plural grooves formed on a reflecting surface.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is 703 308 4814. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703 308 1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7724 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
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April 3, 2001